



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,290

08/23/2006

Takeo Tokiai

294806US0PCT

6806

22850

7590

12/21/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

STANLEY, JANE L

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

12/21/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## DETAILED ACTION

### *Response to Arguments*

Applicant's after final request for reconsideration reply and notice of appeal filed **2 December 2009** has been entered and fully considered. **Claims 1-9** are pending and have not been amended from their previous form (see claims as filed in response to non-final office action, 18 March 2009). Applicant's arguments have been fully considered but were not found persuasive.

Regarding Applicant's comments (see Reply page 2 para 3), such does not constitute sufficient evidence or support that the polymers of Egawa would not also be miscible to the desired degree with a non-fluorinated hydrocarbon refrigerant. Applicant appears to be alleging that the "compatibility" discussed by Egawa constitutes complete miscibility.

Applicants assert that Egawa does not teach or suggest specific "compatibility requirements" (see Reply page 2 para 4 to page 3). As set forth in the previous office action the compatibility requirements discussed by Applicant were deemed to be properties inherent/intrinsic to the compounds and the combination thereof as based on a 103(a) rejection of a combination of two references. Applicant must provide evidence of record demonstrating that such would not be the case and furthermore, it is noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicants also point to *In re Antoine* regarding result-effective variables,

Art Unit: 1796

however, the previously set forth office action did not rely on or invoke a result-effective variable argument. It is noted that instant claim 1 does not include amount limitations on either the refrigerant (A) or the base oil (B).

Applicants argue that Kaneko teaches the hydrocarbon refrigerants as “non-preferred” which constitutes a “leading-away” from the instant invention and that the hydrofluorocarbon and hydrocarbon refrigerants are not equivalent and interchangeable (see Reply page 3 para 2). First it is noted that a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments, and it is also noted that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments (See MPEP 2123 [R-5]; *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971)). Second, while Kaneko teaches that hydrogen-containing Flon refrigerants are preferred, Kaneko also teaches that other employable refrigerants may be used instead including hydrocarbon compounds such as propane, cyclopropane, butane, isobutane and pentane (See Kaneko, col 15 ln 54 to col 16 ln 7). Such constitutes a recognition by Kaneko that both fluorinated and nonfluorinated hydrocarbon refrigerants are useful in the same environment for the same predictable result and as such are equivalent and interchangeable. Kaneko's teaching that fluorinated hydrocarbon refrigerants are preferable does not constitute a teaching away.

Applicant's arguments to the base oils taught by Kaneko (see Reply page 4, para 1) constitutes bodily incorporation, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary

Art Unit: 1796

reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In pointing out that Kaneko teaches polyvinyl ether base oils, the Examiner was merely demonstrating the manner(s) in which Kaneko and Egawa constitute analogous teachings. Both Kaneko and Egawa teach combining similar polyvinyl ether base oils and refrigerants.

Applicants allege that comparative example 2 of the instant specification corresponds to example 1 of Egawa, which demonstrates a solubility outside the limitation of instant claim 1 (see Reply page 4, para 2). However, it is unclear how the two cited examples correspond and furthermore, it is unclear where the "solubility of 48.5 mass%" asserted by Applicant is to be found in the instant specification. Comparative Example 2 of the instant specification is to a propylene oxide only compound which does not appear to be commensurate in scope with the instant claims which are to polyvinyl type compounds (instant formula II). Furthermore, the cited Example 1 of Egawa is to a polymer comprised of a'-only units, i.e. ethyl groups, and does not appear to "correspond" to instant comparative Example 2. Applicant argues that chain length of the alkyl groups corresponding to R<sup>5</sup> or R<sup>6</sup> corresponds to the mutual miscibility of the base oil and refrigerant. However, Egawa teaches the substantially overlapping R and R' units, wherein R is of C1-C3 in length and R' is of C3-C20 in length, which renders obvious the instant R<sup>5</sup> being C1-C4 and R<sup>6</sup> being C2-C4 in length. Applicants have failed to demonstrate the criticality of the difference. It is

Art Unit: 1796

also noted that arguments of counsel cannot take the place of evidence of record (MPEP 716.01(b); *In re Schulze*, 346, F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965).

Applicants comments to global warming as aggravated by the "hydrogen-containing chlorofluoro compounds" of Egawa and Kaneko (see Reply page 4, para 3) are not found persuasive. Kaneko was relied upon to substitute the hydrofluorocarbons of Egawa with hydrocarbons such as propane, butane, etc. (see previous office action). As such, Applicants arguments are moot. Furthermore, the MPEP states that attorney arguments/statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding solution of a long-felt need, etc. (MPEP 716.01(b); see also MPEP 2145).

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANE L. STANLEY whose telephone number is (571)270-3870. The examiner can normally be reached on Monday-Thursday, 7:30 am - 5 pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796

/JLS/

Application/Control Number: 10/590,290  
Art Unit: 1796

Page 6